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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 30, 2014

Mr. Gary Miller, Remedial Project Manager
U.S. Environmental Protection Agency, Region 6
Superfund Division (6SF-RA)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: *Draft Final Interim Feasibility Study Report*, dated March 2014
San Jacinto River Waste Pits Federal Superfund Site - Comments
Harris County, Texas

Dear Mr. Miller:

The Texas Commission on Environmental Quality (TCEQ) Remediation Division, Superfund Section has completed the review of the *Draft Final Interim Feasibility Study Report* (FS) dated March 2014 and received on March 25, 2014. The Draft FS was prepared by Anchor QEA, LLC (Anchor). The TCEQ's comments are provided below.

1. For the southern impoundment, the revised Feasibility Study continues to recommend that institutional controls (ICs) be placed only over selected areas in which depth-weighted concentrations from the single soil boring within each exposure area exceeded the action level protective for the construction worker exposure pathway. The TCEQ does not consider this to be sufficiently protective given the non-homogeneous contaminant distribution, insufficient investigation of potential hot spots, and uncertainty in predicting the exposure and use patterns of future construction workers at the site. Therefore, the TCEQ requests that ICs in the form of a restrictive covenant be placed over the entire area within the identified boundaries of the southern impoundment, excluding the areas to the north and east of Market Street.

2. For all alternatives proposed for the northern impoundment, the TCEQ recommends that dredging limitations be imposed to insure that the upland sand separation area will not be disturbed.

3. Section 6.1.7, page 114 says that Alternatives 4N, 5N, 5aN and 6N provide no long-term benefit while increasing the short-term risk. This assumes that the cap currently in place will have no significant problems over the period modelled; however the TCEQ notes that short term impacts may be still be observed during 30-year period at which long-term impacts were modeled. The evaluation of long-term protectiveness should reflect the lifetime of the remedy and consider the effectiveness at intervals after which short-term impacts may be expected to subside. For this remedy, the long-term benefit of Alternatives 4N, 5N, 5aN, and 6N, may be more appropriately assessed at 100 or 500 years post-completion, rather than 30 years. In the equation of "long-term" benefit of the aforementioned alternatives

versus the short-term risks the conclusion may be quite different. The report should acknowledge this.

4. Appendix B, Section 3.2, page 7: At the site "the limited water depth prohibits large vessels from operating close to the cap." This is not true at the northwest corner closest to barge traffic associated with San Jacinto River Fleet operations. This area has been deemed by the PRP's consultants as too deep to feasibly fill. Storm events or human error will continue to pose a danger of large vessel contact with the cap. The TCEQ notes that the revised Feasibility Study includes measures for a protective perimeter barrier around the northern impoundment to address this issue. However, the TCEQ also notes that the method used for cost estimation consisted of a 5-foot rock berm outside the perimeter of the permanent cap. The TCEQ has concerns that this method would not be sufficient in the deeper areas at the northwest quadrant of the cap where the steeper side slopes are particularly vulnerable and waste is present close to the edges of the cap. The TCEQ understands that this barrier is in the conceptual state and will require a more detailed demonstration during the remedial design that the selected barrier for the northwest quadrant will both meet the objectives of preventing barge vessel contact and will not compromise cap integrity or stability.

5. For Alternatives 4N, 5N, 5aN and 6N, the TCEQ notes inconsistencies between the text and cost sheet related to the use of sheet piling. Also, please clarify the choice of sheet piling versus silt curtains among these alternatives and the rationale behind the methods selected for each alternative.

6. The construction of the Time Critical Removal Action (TCRA) involved hydrodynamic modeling, analysis, and engineering construction. Anchor QEA and Integral Consulting Inc. provided these engineering services for the PRPs. The Texas Board of Professional Engineers (TBPE) requires that firms performing engineering services like the construction of the TCRA must be registered with the TBPE. Also, the engineering work performed must be signed and sealed by a Texas-licensed professional engineer. Please note that our approval of the final remedy will be contingent upon proper PE certification of the engineering work to be performed.

If you have any questions, please contact me at (512) 239-5337.

Sincerely,

Stephen Ellis

Stephen Ellis, Project Manager
Superfund Section
Remediation Division
Texas Commission on Environmental Quality

SE/cw

cc: Valmichael Leos, On-Scene Coordinator, U.S. EPA, Region 6, Superfund Division (6SF-RA),
Carlos Sanchez, Branch Chief, U.S. EPA, Region 6, Superfund Division
Satya Dwivedula, Remediation Division, TCEQ
Sharon Barker, Remediation Division, TCEQ